



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/309,412	05/10/1999	KAZUHIRO HARA	450100-4879	7480
20999	7590	07/20/2006	EXAMINER	
FROMMER LAWRENCE & HAUG 745 FIFTH AVENUE- 10TH FL. NEW YORK, NY 10151			JACKSON, JENISE E	
			ART UNIT	PAPER NUMBER
			2131	

DATE MAILED: 07/20/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	09/309,412	HARA, KAZUHIRO	
	<b>Examiner</b>	<b>Art Unit</b>	
	Jenise E. Jackson	2131	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 04 May 2006.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-19 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                                    |

## DETAILED ACTION

### *Claim Rejections - 35 USC § 102*

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-5, 8-14, 17-19 are rejected under 35 U.S.C. 102(b) as being anticipated by Seth-Smith(4,829,569).

3. As per claim 1, 11, Seth-Smith et al. discloses a data transmission controlling method for controlling transmission of data from data transmitting means to data receiving means over at least first and second communication channels(col. 3, lines 14-18, fig. 1, sheet 1), said data transmission controlling method includes, transmitting data encrypted by said data transmitting means to said data receiving means over a first communication channel provided for data transmission from said data transmitting means to said data receiving means(see col. 3, lines 14-22, fig. 1, sheet 1); wherein prior to transmitting the encrypted data over the first communication channel(see col. 6, lines 45-64), the data transmitting means encapsulates data to be transmitted from the data transmitting means to data receiving means in accordance with a plurality of protocols, wherein at least one of the data capsules resulting from the encapsulation is encrypted, and wherein the data transmitting means supplements an encrypted data section with a section header containing destination address information(see col. 6, lines 30-64); and transmitting restrictive data transmission control information to the data receiving means(see col. 6, lines 30-49) over a second communication channel, having a smaller capacity of data transmission that

Art Unit: 2131

said first communication channel(see col. 6, lines 49-57, fig. 1, sheet 1). The Examiner asserts that Seth-Smith inherently discloses the second communication channel has a smaller capacity, because Seth-Smith discloses one channel can be a landline. Therefore, the teletext information is transmitted in clear text over the landline or satellite (see col. 6, lines 49-52). Seth-Smith discloses wherein the restrictive data transmission control information transmitted over the second communication channel is operating to allow only intended data receiving means to receive the encrypted data, and is configured to substantially simplify decryption of the encrypted data transmitted over the first communication channel(see col. 3, lines 14-22, col. 6, lines 49-65). Seth-Smith discloses restrictive data transmission control information transmitted over the second communication channel(i.e. landline) that is installed independently of the first channel, because Seth-Smith discloses the system of the invention permits the user to communicate with the broadcaster(see col. 6, lines 65-67). The user may request addition of a service, or to pay a bill or the like(see col. 7, line 1). Seth-Smith discloses that the telephone system are suited for this function(see col. 7, lines 1-4). Further, Seth-Smith disclose no uplink facility at the user's station need to be provided(see col. 7, lines 1-6). Thus, Seth-Smith discloses that the satellite first channel is not used, to provide to user's an addition of a service.

4. As per claim 2, wherein said second communication channel is a communication channel permitting bi-directional communication between said data transmitting means and said data receiving means, is inherent in Seth-Smith, because Seth-Smith discloses that the user can communicate with the broadcaster(see col. 6, lines 49-67).

5. As per claims 3, 12, wherein said data transmitting means performs data encryption using an encryption key and wherein said encrypted data from said data transmitting means are

Art Unit: 2131

decrypted by said data receiving means utilizing a decryption key identical to said encryption key used in the data encryption(see col. 3, lines 23-27, col. 20, lines 22-34). The Examiner asserts that the keys must be identical in order to decrypt information, that insures that the proper individual receives information; this is disclosed in Seth-Smith et al.

6. As per claims 4, 13, Seth-Smith et al. discloses wherein said encryption key and said decryption key are session keys(i.e. service key) for encrypting and decrypting information and data(see col. 3, lines 14-22, col. 10, lines 38-42, col. 22, lines 9-36, 57-60).

7. As per claims 5, 14, Seth-Smith discloses wherein said session keys(i.e. service keys) are updated at predetermined intervals(see col. 11, lines 66-67, col. 12, lines 1-8, col. 19, lines 33-37).

8. As per claims 8, 17, Seth-Smith discloses said first communication channel is a satellite link permitting unidirectional communication from said data transmitting means to said data receiving means; and wherein said second communication channel is a communication channel permitting bi-directional communication between said data transmitting means and said data receiving means(see col. 6, lines 49-55).

9. As per claims 9-10, 18-19, Seth-Smith inherently discloses wherein said data receiving means is constituted as an IP router, and bridge, because Seth-Smith discloses a subscription television system that uses a satellite to transmit data(see abstract).

### ***Claim Rejections - 35 USC § 103***

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person

Art Unit: 2131

having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

11. Claims 6-7, 15-16, are rejected under 35 U.S.C. 103(a) as being unpatentable over Seth-Smith et al. in view of Mueller.

12. As per claims 6, and 15, Seth-Smith discloses data transmitting means and said data receiving means, and discloses session keys(see above already addressed as per claim 1 and 4).

13. As per claims 6 and 15, Seth-Smith et al. is silent on a master key that encrypts and decrypts session keys.

14. However, Mueller discloses a master key that encrypts and decrypts session keys(see col. 1, lines 46-61).

15. It would have been obvious to one ordinary skill in the art to combine the teachings of Mueller within the system of Seth-Smith, because secure session key generation methods, such as Mueller offer distinct advantage that the intercepted, encrypted messages based on the session key cannot be decrypted at a later time even if access to the actual encryption system is gained(see col. 2, lines 1-7 of Mueller).

16. As per claims 7, 16, Seth-Smith discloses said data transmitting means possesses said session keys corresponding to all data receiving means authorized to receive specific information and data; and wherein said data transmitting means transmits in advance said session keys to said data receiving means authorized to receive specific information and data(see col. 21, lines 49-65, col. 22, lines 9-34).

### **Response To Amendment**

17. The Applicant states that Seth-Smith does not disclose encrypted data and restrictive data transmission control information that are transmitted over independent communication channels.

Art Unit: 2131

The Examiner disagrees with the Applicant. In the specification the Applicant discloses that restrictive data transmission control information is information, which allows a specific data receiver or receivers to receive data sent from the data transmitter(see pg. 22). Seth-Smith discloses restrictive data transmission control information transmitted over the second communication channel(i.e. landline) that is installed independently of the first channel, because Seth-Smith discloses the system of the invention permits the user to communicate with the broadcaster(see col. 6, lines 65-67). The user may request addition of a service, or to pay a bill or the like(see col. 7, line 1). Seth-Smith discloses that the telephone system are suited for this function(see col. 7, lines 1-4). Further, Seth-Smith discloses no uplink facility at the user's station needs to be provided(see col. 7, lines 1-6). Thus, Seth-Smith discloses that the satellite first channel is not used, to provide to user's an addition of a service.

18. Seth-Smith also discloses communication systems of the invention requires certain data to be transmitted system-wide, or that individual decoders can receive certain information(see col. 10, lines 12-17). Seth-Smith discloses that other information repetitively transmitted as part of the system data includes the program tier number, the user selects which tiers of programs he chooses to watch. The user indicates which tiers he wished to view to the broadcaster by telephone or by letter(see col. 10, lines 43-53).

19. Seth-Smith operates to allow only intended data receiving means to receive the encrypted data, because Seth-Smith discloses messages can only be received by the proper receiver(see col. 3, lines 16-18). Seth-Smith discloses that the text is heavily protected against improper receipt, that is encrypted(see col. 3, lines 16-19). Thus that the encrypted message can only be received and decrypted at the correct receiving means(i.e. decoder)(see col. 3, lines 14-22). Seth-Smith

Art Unit: 2131

discloses that the encrypted signal is sent over the first communication channel(satellite)(see col. 6, lines 49-52). Seth-Smith discloses the encrypted signal is transmitted by satellite, by landline or a combination of both(see col. 6, lines 51-52). Thus, Seth-Smith discloses three methods of transmission in this passage, one being to transmit the encrypted signal by satellite(i.e. first channel) which meets the claim limitation.

### *Conclusion*


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jenise E Jackson whose telephone number is (571) 272-3791. The examiner can normally be reached on M-Th (6:00 a.m. - 3:30 p.m.) alternate Friday's.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ayaz Sheikh can be reached on (571) 272-3795. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



July 14, 2006



AYAZ SHEIKH  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2100